## Logic Model for Subobjective 1.1.3: Improve Visibility (Draft)

## **EPA HEADQUARTERS**

#### RESOURCES

Budget 6.3 FTEs \$1.1 million

**Facilities** 

Equipment

Information Resources: CAA-Title I ISTEA/TEA 21

Research Results Tropospheric

ozone [Subobj.1.1.4] Health effects

[Subobj. 1.1.5] Ecosystem effects [Goal 8]

Non-EPA research

Stakeholders and Partners

Regional Planning Organizations [3] Other Federal

Agencies
IMPROVE Committee

USDA USDOI USDOE

USDOT NARSTO

## **PROGRAMS/ACTIVITIES [2]**

State Implemented Strategies/Control [1] Regional Haze \*

Other air pollution reduction programs contribute to visibility protection. These include:

- Acid Rain Program (See Subobjective 1.3.1 model)
- NAAQS for ozone and particulate matter (See Subobjectives 1.1.1 and 1.1.2 models)
- Regional Transport of Nitrogen Oxides
- Tailpipe Emissions and Cleaner Fuels (See Subobjective 1.1.1 model)
- Air Toxics Program (See Subobjective 1.2.3 model)
- Regional Haze State Implementation Plans

Federal Emissions Standards Implementation
Federal standards established for ozone and particulates
(See Subobjectives 1.1.1 and 1.1.2 models)

<u>Incentive-Based Programs</u>
See comments under Regulatory Control

Measurement and Assessment Activities
IMPROVE (\$3.5 million in 105 grant funding set-aside)

Research

No EPA-funded research directly pertaining to Visibility was identified in FY 2001 plans. Ozone and PM research would have applicability to the Visibility Program. See Resources Column.

Education and Outreach Activities
Training program

TTN TRENDS

#### **OUTPUTS**

State Implemented
Strategies/Controls
Regulations
Guidance
Standards
Plans
Strategies

Federal Emissions Standards See Subojective 1.1.1 and 1.1.2 logic models

Incentive-Based Guidance

Measurement
Air Quality Trends Reports
Emissions Progress
Assessment Reports

Outreach/Education
Regional Haze/Visibility
Training Courses
Conferences
Speeches
Websites

#### **CUSTOMERS**

State Implemented
Strategies/ Controls
EPA Regions
State/Local/Tribal
Governments
Regional Planning
Organizations
Office of General
Counsel
Tribes
Congress
Trade Associations

Trade Associations Public Academia Other Federal Agencies

Federal Emission Standards All listed above

(DOI/USDA)

Incentive-Based All listed above

Measurement All listed above

Outreach/Education
All listed above

SHORT-TERM OUTCOMES (Knowledge, Attitudes, Skills, and Aspirations)

Customers become aware of and understand EPA regulations and HQ's policies regarding Regional Haze/Visibility.

Customers gain knowledge about extent of pollution, causes and sources of pollution, effects of pollution, effectiveness of control strategies.

Customers decide to comply with mandated controls as well as make voluntary efforts to reduce emissions.

Unintended
Consequences
Customer or
stakeholder
disagrees with EPA
decisions,
regulations,
policies, or
guidance.

## SHORT-TERM OUTCOMES (ACTIONS)

State Implemented Strategies/Controls EPA Regions implement HQs policies.

In coordination with EPA Regions, States implement programs in accordance with regulations and EPA policy.

In coordination with Regions and States:
-Industry complies with regulations.
-Public changes behavior to reduce emissions and exposure.

Strategies/Controls
Federal Emission Standards
Regulated industry
and public takes
actions needed
to implement
Regional
Haze/Visibility
strategies.

Unintended Consequences
Customers or
stakeholders sue EPA.

Customers do not implement EPA policies, comply with regulations, or change behavior contributing to air pollution.

## **RESOURCES**

Budget 12.6 FTEs \$1.2 million

Information Resources HQ's policies MOAs Operating plans Regulations

## <u>Facilities</u>

Equipment

Stakeholders and Partners
Regional Planning
Organizations [3]
Other Federal
Agencies
IMPROVE Committee
Grand Canyon
Visibility Transport
Commission

## **PROGRAMS/ACTIVITIES** [1]

**Delegated Programs** 

Review draft SIPs and provide public comments
Provide policy guidance and technical support to states.
developing Regional Haze SIP revisions

Continue to develop and implement standards, plans, strategies, and actions to preserve air quality improvements already made.

Other air pollution programs contribute to visibility protection. (See programs listed under Headquarter's activities)

Measurement and Assessment Activities

Monitor ambient air quality for Regional Haze/Visibility in order to assess environmental quality and progress.

Emissions Inventories (Triennial) Modeling Analysis

Education and Outreach Activities
Web site

## **OUTPUTS**

State Implemented
Strategies/Controls
Comments on strategies
(i.e, SIPs)
Guidance documents

Federal Emissions
Standards
Implement Federal
Implementation Plans in about 20 states.

Measurement/Assessment
Monitoring reports
Progress reports
Emissions Inventories

Outreach/Education
PSD Permit reviews
Consultations with Federal
Land Managers

#### **CUSTOMERS**

State/Local/Tribal Governments

Industry

**Public** 

**Trade Associations** 

Government Associations

Tribes

**RPOs** 

**EPAHQ** 

Regions

SHORT-TERM OUTCOMES (Knowledge, Attitudes, Skills, and Aspirations)

State/Local/Tribal
Agencies and
Regional
Planning
Organizations
understand EPA
Regional Haze
regulations,
policies and
requirements for
developing control
strategies.

# SHORT-TERM OUTCOMES (ACTIONS)

First, State/Local/Tribal Agencies and Regional Planning Organizations develop Regional Haze/Visibility strategies that comply with all statutory and regulatory requirements.

## Second,

State/Local/Tribal Agencies implement Regional Haze/ Visibility program in accordance with their strategies, and EPA policy and guidance.

Third, in coordination with State/Regional Organizations, industry and public take actions in accordance with the Regional Haze/ Visibility strategies developed by their states.

## STATES, LOCAL AGENCIES AND TRIBES

## RESOURCES

Budget \$5 million in 105 Grant funds State funds

<u>Facilities</u>

**Equipment** 

Information
Resources
EPA policy,
guidance, and
regulations
State regulations

Stakeholder input

Partners
Regional Planning
Organization
members [3]

## PROGRAMS/ACTIVITIES [1]

<u>Delegated Program</u>
Develop Regional Haze/Visibility strategies
(i.e., State Implementation Plans)

Other air pollution programs contribute to visibility protection, in particular, the Ozone and Particulate Matter NAAQS programs (These programs are listed under the Headquarter's Activities Column).

Measurement and Assessment Activities
IMPROVE

Research

Education and Outreach Activities

## OUTPUTS

State Implemented Strategies/Controls SIPS for Regional Haze. Plan must include progress, goals, and strategies. States have the option to participate in regional planning and strategies. (If state is designated in attainment or unclassifiable for PM2.5. the plan is due 1 year from the designation date. Plans due in the period 2004 - 2006.

Progress reports are due every 5 years.

2006 - 2008)

If state is designated

non-attainment for PM

from designation date.

2.5, plan is due 3 years

Plans due in the period

Measurement/Assessments
Monitoring reports
Emissions Inventories
Reports

Research

Outreach/Education

## **CUSTOMERS**

EPA HQ

Regions

Industry

Public

## SHORT-TERM OUTCOMES (Knowledge, Attitudes, Skills, and Aspirations)

Industry and public understand actions needed to implement the Regional Haze/Visibility strategies.

Industry and public decide to take the actions needed to implement the Regional Haze/Visibility strategies.

## SHORT-TERM OUTCOMES (ACTIONS)

Industry and public take actions in accordance with the Regional Haze/Visibility strategies developed by their states.

#### OTHER EPA AND NON-EPA PROGRAMS THAT CONTRIBUTE TO REDUCED VOC AND NOX EMISSIONS

## **EPA GOAL 1 PROGRAMS**

Subobjective 1.1.1 - Attain Ozone NAAQS

Subobjective 1.1.2 - Attain Particulate Matter NAAQS Subobjective 1.1.5 - Attain Sulfur Dioxide NAAQS

Subobjective 1.1.6 - Maintain Nitrogen Dioxide NAAQS
Subobjective 1.2.3 - Reduce Cancer and Non-Cancer Risks From Air Toxics

Subobjective 1.3.1 - Reduce Acid Rain Precursors

#### EPA NON-GOAL 1 PROGRAMS

Goal 4 - Preventing Pollution and Reducing Risk in Communities, Homes, Workplace, and Ecosystems Goal 6 - Reduction of Global and Cross-Border Environmental Risks (e.g., Green Lights, Energy STAR) Goal 8 - Sound Science, Improved Understanding of Environmental Risks, and Greater Innovation to Address Environmental Problems

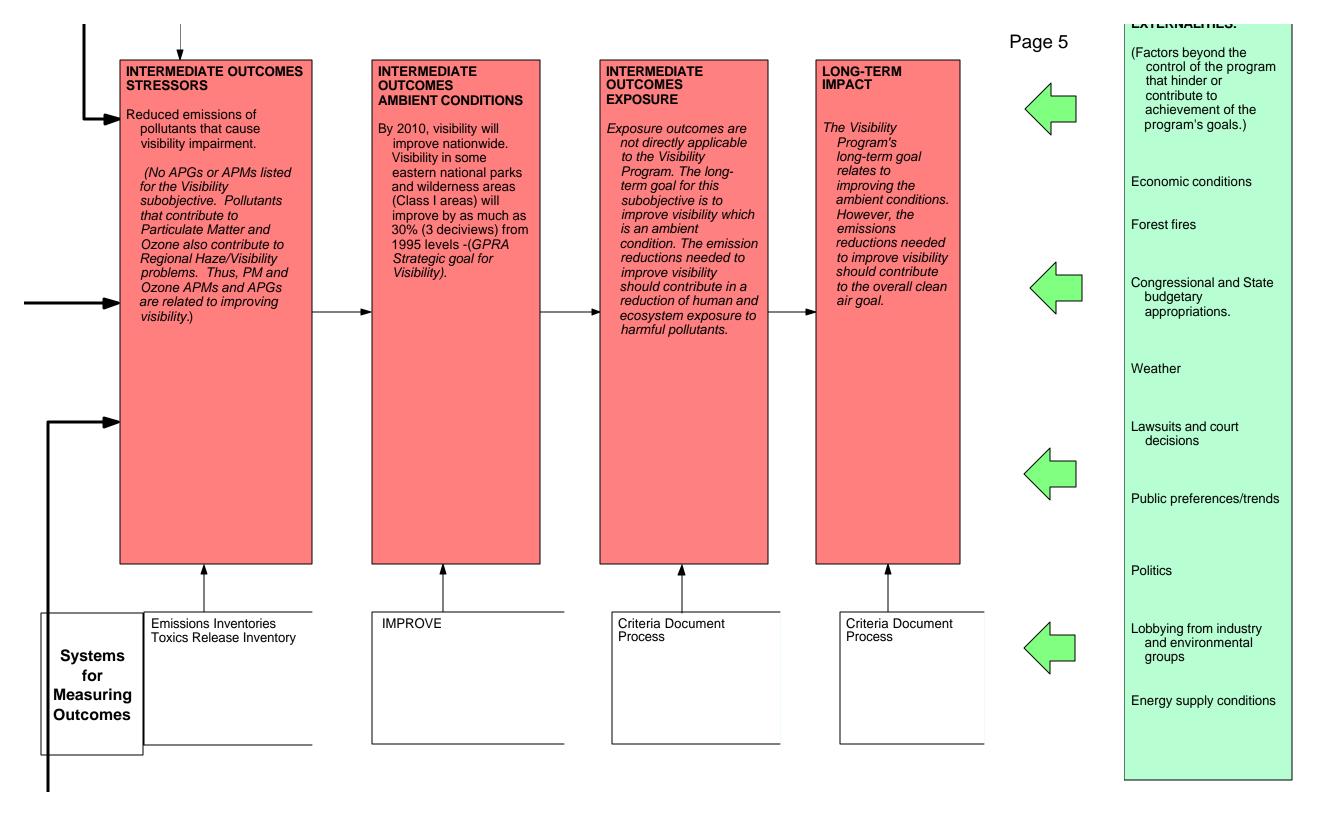
Goal 9 - A Credible Deterrent to Pollution and Greater Compliance with the Law [4]

## FEDERAL AGENCY PROGRAMS

National Park Service

U.S. Fish and Wildlife Service

U.S. Forest Service



#### **FOOTNOTES:**

- [1] = This model was prepared based on EPA planning and budget documents, numerous EPA web-based information, applicable statutes and regulations, and interviews with EPA officials on the preliminary versions of the model. We did not discuss the model or its contents with EPA external stakeholders such as Congressional members, Oversight committees, industry groups, environmental groups or state agencies.
- [2] = Activities related to other programs that contribute to visibility protection are not listed. Headquarter's activities specifically related to Regional Haze/Visibility program according to the FY 2000 Subobjectives Document.
  - Advice and counsel to the Administrator on the Regional Haze/Visibility Programs. Effective policy, program, and management guidance to the Office of Air and Radiation (OAR) program, staff, Regional Offices, States and Tribes. Analysis, planning, budgeting and management capability to assure analytical support to Regional, State and Tribal programs for which the Assistant Administrator is National Program Manager. Providing technical assistance on air pollution control technologies and specific small business compliance and control requirements to State, Local and Tribal air pollution agencies. Implementing the air quality management provisions of the CAA (Title I). Providing scientific and technical guidance and support to other EPA Headquarters Offices, Regional Offices, and State, Local and Tribal agencies in the ambient air quality monitoring and modeling area. Providing scientific and technical guidance and support to other EPA Headquarters Offices, Regional Offices, and State, Local and Tribal agencies in the control strategy demonstrations area. Issuance of new and revised regulatory requirements and related technical guidance. Development and operation of information management systems for storing, retrieving, and analyzing ambient air quality and emissions data at the state and national level. Preparation of trends analyses and related air quality and emission progress assessments for program evaluation and development as well as for public information. Develop policies, guidelines and regulations for air pollution control programs [principally State Implementation Plans (SIP's)]. Assist and audit the development and implementation of programs to facilitate national consistency at the Regional, State, and Local levels. Manage a training program for air pollution professionals funded under Section 105. Issue national guidance on Regional Haze/Visibility SIP revisions and attainment demonstration requirements. Continue to develop and implement standards, plans, strategies, a
- [3] = The Visibility/Haze Program differs from the other criteria pollutants primarily because of the reliance on Regional Planning Organizations. Regional Planning Organizations are a key to implementing the program. The Organizations involved are: Western States Air Resources Council (WESTAR), Mid-Atlantic Northeast Visibility Union (MANE VU), Lake Michigan Air Directors Consortium (LADCO), Central States Air Resources Agencies (CENSARA), Southeast States Air Resource Managers (SESARM), and Southern Appalachian Mountain Initiative (SAMI).
- [4] = OECA activities include: developing enforcement-related rulemakings, policy, and guidance; ensuring enforceability of rules; setting national enforcement priorities; investigating and deterring violations; participating in civil and administrative case negotiations, litigation and settlements; managing national enforcement programs; collecting and integrating compliance and enforcement data; developing enforcement initiatives; and coordinating enforcement activities with States, Locals, Tribes, EPA Regions, OGC, DOJ and other Federal Agencies. Most state and local agencies are authorized to operate federal air regulatory programs which includes conducting compliance monitoring activities such as on-site inspections and initiating appropriate enforcement actions in response to identified violations.